# Antelope Valley-East Kern Water Agency, California

# 2010 Urban Water Management Plan



Antelope Valley-East Kern Water Agency

## **Section 3** System Demands

#### Law

10631 (e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:

- (A) Single-family residential; (B) Multifamily; (C) Commercial; (D) Industrial; (E) Institutional and governmental; (F) Landscape; (G) Sales to other agencies; (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof;
- (2) Agricultural.
- (3) The water use projections shall be in the same 5-year increments to 20 years or as far as data is available..

### 3.1 Water Demands by Customer Type – Past, Present, and Future

**Table 4** details water purveyors deliveries for M&I. Population increases as shown in **Table 2** were used to help develop water use projections, except that projections for LA County Waterworks District, Rosamond CSD, and Quartz Hill WD were taken from their draft *2010 Integrated Regional Urban Water Management Plan for the Antelope Valley* dated May 25, 2011. No adjustment is made for potential reductions in percapita demand through improved conservation or water reuse.

Table 4 Total Water Use (M&I) (AF/YR)										
Water Distributed	2006	2010	2015	2020	2025	2030				
Billiton Exploration U.S.A.	22	4	22	22	22	22				
Boron CSD	523	927	540	545	550	555				
City of California City	1,071	1,045	1,312	1,572	1,742	1,931				
Desert Lake CSD	165	15	202	242	268	297				
Desert Sage Apartments	6	6	7	9	10	11				
Edgemont Acres MWC	193	1	236	283	314	348				
Edwards AFB	2,330	1,747	2,855	3,419	3,790	4,201				
FPL Energy	1,019	1,269	1,042	1,042	1,042	1,042				
Mojave Public Utility District	93	0	114	136	151	168				
Rosamond CSD	1,303	262	1,900	2,000	2,600	3,400				
US Borax 1625	1,649	1,506	1,649	1,649	1,649	1,649				
Antelope Valley Country Club	278	75	278	278	278	278				
California Water Service Co	346	161	424	508	563	624				
El Dorado MWC	426	1	426	426	426	426				
Landale MWC	10	5	12	15	16	18				
Los Angeles County Waterworks Districts	49,414	40,638	61,000	61,000	61,000	61,000				
Palm Ranch Irrigation District	843	121	1,033	1,237	1,371	1,520				
Quartz Hill Water District	4,322	3,534	6,800	6,800	6,800	6,800				
Shadow Acres MWC	324	212	397	476	527	584				
Sunnyside Farms MWC	232	173	284	340	377	418				
Westside Park MWC	28	1	34	41	46	50				
White Fence Farms MWC	556	393	681	816	904	1,002				
Lake Elizabeth MWC	387	463	474	568	629	698				
Sales to water purveyors (M&I)	65,540	53,062	81,725	83,425	85,076	87,043				

Table 5 details the additional water uses and losses.

Table 5 Additional Water Uses and Losses (AF/YR)											
	2006	2010	2015	2020	2025	2030					
Raw Water	9,206	6,612	6,612	6,612	6,612	6,612					
Unaccounted-for system losses	2,103	1,001	2,738	2,791	2,842	2,903					
Total	11,309	7,613	9,350	9,403	9,454	9,515					

In case of rationing, the Agency will be able to use its customer database for implementing any possible water reductions.

**Table 5** does not include water used for banking. The WSSP-2 project may bank as much as 23,000 AFY, if the water is available. However, as water would be banked only in periods of excess supply, it is not considered to be a demand for determination of water supply reliability.

#### 3.1.1 Agricultural Sector

Agricultural water demand from AVEKs system is projected to have minimal growth in the next ten to fifteen years with a possible decrease over the next twenty to thirty years. The water deliveries indicated in **Table 5** show consistent amounts through 2030. Agricultural land use within the Agency's area is currently